State of Washington
Decision Package

Agency: **310 Department of Corrections**
Decision Package Code/Title: **DE – Application and Information Infrastructure**

Budget Period: **2005-07**

Budget Level: **PL – Performance Level**

Recommendation Summary Text:
This request provides funds for a new integrated, cost effective application infrastructure for developing and deploying business applications to meet the Department's information needs.

Agency Total

Fiscal Detail	FY 2006	FY 2007	Total
Operating Expenditures			
001-1 - General Fund – Basic Account-State	$1,381,000	$1,575,000	$2,956,000

Staffing	FY 2006	FY 2007	Annual Average
FTEs	2.0	2.0	2.0

Program 100-Admin & Program Support

Fiscal Detail	FY 2006	FY 2007	Total
Operating Expenditures			
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Staffing	FY 2006	FY 2007	Annual Average
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Package Description
The Department's current business applications and data required to make business essential decisions are often scattered across disconnected, incompatible, and multiple environments. It is very difficult for business managers and their staff to manually process incomplete and often confusing pieces of data from many separate business systems. Additionally, with disparate systems being built to solve business problems, the same data is often manually captured multiple times which is not only costly in terms of data entry but also increases the risk of incorrect data being entered and used. The Department relies on these disparate systems to make business critical decisions and to deal with emergency and high-risk situations. Disparate information systems result in slowing down business services, compromising the quality of business services, potentially placing our communities at greater risk and increasing costs to the Department. Actions or inactions taken based on delayed or incomplete information can result in a heightened liability risk to our communities. Thus, access to accurate and timely data is crucial.

Furthermore, because data exists as part of disparate business solutions hosted on disparate hardware and software platforms, the Department's ability to fully participate in the Washington State Justice

Information Network (JIN) and integrated justice strategies nationally is limited. The current infrastructure used is a barrier for deploying highly efficient and effective enterprise business solutions and therefore a barrier to easily sharing data.

Equally important is the ability to leverage as efficiently as possible the Department's limited information technology (IT) staff (147 staff supporting over 8,000 Department employees in over 200 locations across the state). Continuing to build solutions without a more integrated framework taxes the already overburden IT staff to the point that IT can only satisfy a limited number of business requests for automated solutions. Each year, IT falls further behind in meeting the requests from its business customers. For example, from January 2004 through June 2004, IT received 449 new IT requests but could only fulfill 204 of these requests. The backlog of requests continues to increase leaving many solutions that could improve the Department business processes waiting for resources to become available. An integrated framework will help leverage this limited staff by building solutions that can be more easily supported and maintained.

It is for these reasons that the Department requests funding necessary to build an enterprise application infrastructure to develop and deploy the optimal business solutions using the best technology available.

Narrative Justification and Impact Statement

How contributes to strategic plan:
This request is critical to agency activities, the strategic plan, and statewide results. The request ensures that the Department has the necessary resources to maintain current levels of service and performance.

This request is required to sustain the agency activity to S*upervise High-Risk Offenders*. The resources identified will be directed to support the agency objective to increase information technology infrastructure capacity connectivity so that the Department's data is assured by a robust data and information infrastructure. This objective and strategy move the Department closer to meeting its high-level organizational goal to enhance organizational capacity and competency. This high-level goal is an intermediate outcome and helps achieve statewide results that improve the safety of people and property.

Reason for change:
This change is necessary in order for the Department to develop an integrated view of all the data it collects and manages. This change will ultimately position the Department to more readily comply with information requests from stakeholders, use its current correctional program staff and IT staff more effectively, and improve the current business processes that use data from disparate sources.

Impact on clients and services:
Department staff, as well as justice entities, will have the availability of information that is easy to access, accurate, and timely. The Department will be positioned to share data with other criminal justice agencies.

Department IT staff will greatly benefit reducing complexity and duplication. Additionally, the application infrastructure will help the Department's increase the strategic impact of the information technology investments makes to support the people, processes, information, and relationships that drive the business.

Impact on other state programs:
The application infrastructure will incorporate an integration architecture that is intrinsically designed to work together and interact seamlessly with other data and applications systems. The integrated

architecture will allow us to share information across justice entities with more accurate and timely data responses.

Relationship to capital budget:
N/A

Required changes to existing RCW, WAC, contract, or plan:
N/A

Alternatives explored by agency:
The alternative is to continue the isolated silo application infrastructure. The silo application infrastructure will not have interoperability and will need a separate infrastructure for each silo application. That is, developers have to build the silo-specific infrastructures themselves. It creates myriads of silos that are redundant and costly to maintain. It can not meet the business needs for integrating the applications within the existing IT environment.

Budget impacts in future biennia:
These costs are ongoing into future biennia with the exception of the $816,000 in start-up costs.

Distinction between one-time and ongoing costs:
The start-up costs associated with the two positions are one-time costs. Additionally, the start-up costs for migration of existing applications and development of new applications is one-time. All other costs are associated with staffing, software, training, and travel are assumed to be ongoing.

Effects of non-funding:
Not funding this request has a number of significant effects:

- The Department will not be able to fully participate in JIN nor in national integrated justice strategies;
- As more disparate non-enterprise solutions are deployed, there will be an increase risk to the safety of our communities because information to make business critical decisions is not easily available or is incorrect;
- Ineffective use of information technology resources will continue thus preventing and in some cases limiting all together the ability of the business to improve it's efficiencies by leveraging automated solutions;
- Our data structure will continue to consist of stand-alone applications that are interoperable with each other; and
- The Department will continue to struggle in providing timely data that requires extensive staff time to extract from the stand-alone applications.

Expenditure Calculations and Assumptions:
One-time funding of $1,236,000 is requested to contract with a consultant to develop and deploy solutions framework and migrate existing applications to the new infrastructure. The Solutions Framework (Standard Process and Architecture) would include the following: Team Process; Service-Oriented Solutions Architecture; Solutions Management; Effective Communication; Risk Management; Development; and Change Management.

The Department requests two FTEs to manage the new infrastructure:

Enterprise Solutions Architect (ESA) (ITAS6):
The Department needs an position to manage, maintain, and update the enterprise solutions framework that will govern the administration of the application development and hosting environments. The ESA

will work with business managers to design and develop an enterprise business model including the business requirements and processes and translate them into enterprise solutions architecture. The ESA will work with solutions developers to design and develop an enterprise system model. The enterprise solutions architect will ensure an alignment of business needs with the business solutions development so that IT can deliver the highest value to its customers.

Enterprise Systems Administrator for Application Infrastructure (ITAS5):
This position will administer and maintain all the servers in the integrated application infrastructure environments. The servers may include applications/web servers, database servers, middleware servers, data center servers, security/identify servers, deployment servers, code management servers, change management servers, content management servers, etc. The administration of these servers include software/hardware maintenance and upgrades, server configurations, server installations, implementing the change requests on the application infrastructure, and securing and backing up the servers.

The Department requests the hardware and software needed to support the new infrastructure approximated at $1,276,000. The Department's standard replacement cycle for server hardware is five years. For the server software, it needs major version upgrade every three to four years, including the technical support for the upgrade. If we systematically replace one fifth of the hardware, annual cost of hardware maintenance will be one fifth of the total hardware cost. The annual software maintenance cost would be approximately 30 percent of the total software cost.

Object Detail	**FY 2006**	**FY 2007**	**Total**
A Salaries and Wages	$127,000	$127,000	$254,000
B Employee Benefits	$37,000	$37,000	$74,000
C Personal Service Contracts	$618,000	$618,000	$1,236,000
E Goods and Services	$54,000	$54,000	$108,000
G Travel	$4,000	$4,000	$8,000
J Capital Outlays	$541,000	$735,000	$1,276,000
Total Objects	**$1,381,000**	**$1,575,000**	**$2,956,000**